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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/812,438	03/30/2004	Youssef A. Ghoneim	GP-303819	3370

7590

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EXAMINER
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ZANELLI, MICHAEL J

ART UNIT	PAPER NUMBER
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3661

DATE MAILED: 08/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/812,438

Applicant(s)

GHONEIM, YOUSSEF A.

Examiner

Michael J. Zanelli

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 30 March 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 8-26 is/are rejected.
- 7) ☒ Claim(s) 5-7 and 27-31 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 3/30/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. The application filed 3/20/04 has been examined. Claims 1-31 are pending.
2. The IDS filed 3/30/04 has been considered.
3. The drawings are objected to because the blocks shown in Fig. 2 must be labeled with suitable legends. Also reference numerals 32 and 120 are pointing to the same element.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. Claims 5-7, 16-24 and 29-31 are objected to because of the following informalities:
  - A. As per claims 5, 16 and 29 insert --control-- after "prior" (each occurrence).
  - B. As per claim 23, change "claim20" to --claim 20--.

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- C. All claims depending from an objected base claim are also objected to as containing the same deficiencies.
5. Claims 9-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- A. As per claim 9, "said calculating an estimated steering behavior indicator for a control loop ( $k_0$ )" lacks antecedence. Note claim 8 does not refer to a specific variable " $k_0$ ".
- B. As per claims 15 and 20, the claims are unclear as to which weighting factor "the weighting factor" (each occurrence) is referring to since multiple weighting factors are previously recited. In claim 20, at lines 1-2 "the weighting factor  $\alpha(k_0)$ " and at lines 20-21 "the weighting factor  $\alpha_2(k_0)$ " lack antecedence.
- C. All claims depending from a rejected base claim are also rejected as containing the same deficiencies.
6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:
- A person shall be entitled to a patent unless –
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
7. Claims 1, 8, 25 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Hac et al. (6,035,251).

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- A. As per claims 1, 8 and 25, Hac discloses a method and system for controlling a vehicle (Fig. 1) which includes providing/sensing a plurality of dynamic state inputs to a controller adapted to execute a plurality of control loops (col. 1, lines 29-31; col. 2, lines 35-49); calculating an estimated steering behavior (Fig. 8; col. 3, lines 13-21; see also clm 12); storing information related to the dynamic state inputs and the steering behavior whereby the operations performed by the computer (col. 4, lines 31-35) inherently require at least temporary storage of values and col. 5, lines 21-27 disclose operations using values from previous control loop operations; and controlling the vehicle in response to the steering behavior (Figs. 4, 8).
- B. As per claim 26, as above wherein the dynamic state inputs may include speed, yaw rate, steering angle and lateral acceleration (col. 2, lines 38-49).
8. Claims 1, 8 and 25-26 are further rejected under 35 U.S.C. 102(b) as being anticipated by Nishizaki et al. (6,415,215).

A. As per claims 1, 8 and 25, Nishizaki discloses a method and system for controlling a vehicle (Fig. 1) which includes providing/sensing a plurality of dynamic state inputs (13-15b) to a controller (20) adapted to execute a plurality of control loops (Fig. 2; col. 17, lines 50-56); calculating an estimated steering behavior (col. 18, lines 1-10); storing information related to the dynamic state inputs and the steering behavior whereby the operations performed by the controller (20) inherently require at least temporary storage of values; and controlling the vehicle in response to the steering behavior (col. 25, lines 24-31).

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B. As per claim 26, as above wherein the dynamic state inputs may include speed, yaw rate, steering angle and lateral acceleration (cols. 11-12).

9. Claims 1-4, 8-12 and 25 are rejected under 35 U.S.C. 102(e) as being anticipated by Adachi (6,615,124).

A. As per claims 1, 8 and 25, Adachi discloses a method and system for controlling a vehicle (Fig. 1) which includes providing/sensing a plurality of dynamic state inputs (1-1, 1-2, 1-3) to a controller (3-1) adapted to execute a plurality of control loops (Fig. 2); calculating an estimated steering behavior (col. 4, line 36 to col. 5, line 3); storing information related to the dynamic state inputs and the steering behavior whereby the operations performed by the controller (3-1) inherently require at least temporary storage of values (col. 4, lines 15-19); and controlling the vehicle in response to the steering behavior (Fig. 2).

B. As per claims 2-4 and 9-12, as above whereby the estimation of the steering behavior for the control loop includes updating a prior steering behavior indicator using a correction term and weighting factors to provide a current steering behavior estimation (see Fig. 2; col. 4, line 64 to col. 5, line 3; col. 5, line 37 to col. 6, line 67; col. 7, line 45+; Tables 1-5).

10. Claims 1, 8, 25 and 26 are further rejected under 35 U.S.C. 102(e) as being anticipated by Kim (6,842,683).

A. As per claims 1, 8 and 25, Kim discloses a method and system for controlling a vehicle (Fig. 1) which includes providing/sensing a plurality of dynamic state inputs (10) to a controller (20) adapted to execute a plurality of control loops (col. 1, lines 7-12);

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calculating an estimated steering behavior (26); storing information related to the dynamic state inputs and the steering behavior whereby the operations performed by the controller (20) inherently require at least temporary storage of values; and controlling the vehicle in response to the steering behavior (Fig. 1; col. 3, lines 31-42).

B. As per claim 26, as above wherein the dynamic state inputs may include speed, yaw rate, steering angle and lateral acceleration (Fig. 1:10).

11. Claims 5-7, 13-24 and 27-31 are distinguishable over the prior art.


12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited documents are of general interest.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Zanelli whose telephone number is (571) 272-6969. The examiner can normally be reached on Monday-Thursday 8:30 AM - 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas G. Black can be reached on (571) 272-6956. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/mjz

  
MICHAEL J. ZANELLI  
PRIMARY EXAMINER